

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C. 20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 04 September 2000 (04.09.00)	
International application No. PCT/GB00/00235	Applicant's or agent's file reference HCM/C84.01/Q
International filing date (day/month/year) 28 January 2000 (28.01.00)	Priority date (day/month/year) 02 February 1999 (02.02.99)
Applicant NESS, Jeremy, Nicholas et al	

1. The designated Office is hereby notified of its election made:

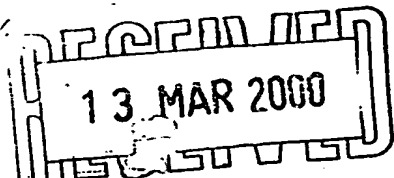
☒ in the demand filed with the International Preliminary Examining Authority on:  
09 August 2000 (09.08.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer S. Mafla Telephone No.: (41-22) 338.83.38
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## PCT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

**NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT**

(PCT Administrative Instructions, Section 411)

To:

KEITH W NASH & CO.  
90-92 Regent Street  
Cambridge CB2 1DP  
ROYAUME-UNI

Date of mailing (day/month/year) 02 March 2000 (02.03.00)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference HCM/C84.01/Q	
International application No. PCT/GB00/00235	International filing date (day/month/year) 28 January 2000 (28.01.00)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 02 February 1999 (02.02.99)
Applicant QUEST INTERNATIONAL B.V. et al	

- The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
02 Febr 1999 (02.02.99)	9902225.3	GB	16 Febr 2000 (16.02.00)
16 Marc 1999 (16.03.99)	9905868.7	GB	16 Febr 2000 (16.02.00)

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer

Marc Salzman

Telephone No. (41-22) 338.83.38

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>HCM/C84.01/Q</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/GB00/00235</b>	International filing date (day/month/year) <b>28/01/2000</b>	Priority date (day/month/year) <b>02/02/1999</b>
International Patent Classification (IPC) or national classification and IPC <b>C11D3/50</b>		
Applicant <b>QUEST INTERNATIONAL B.V. et al.</b>		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 6 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  <b>09/08/2000</b>	Date of completion of this report  <b>21.05.2001</b>
Name and mailing address of the International preliminary examining authority:   <b>European Patent Office</b> <b>D-80298 Munich</b> <b>Tel. +49 89 2399 - 0 Tx: 523656 epmu d</b> <b>Fax: +49 89 2399 - 4465</b>	Authorized officer  <b>Renoth, H</b>  <b>Telephone No. +49 89 2399 8589</b> 

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/00235

## I. Basis of the report

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):  
**Description, pages:**

1-20 as originally filed

### Claims, No.:

1-13 as received on 07/03/2001 with letter of 05/03/2001

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings; sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/00235

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes:	Claims	1-13
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-13
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-13
	No:	Claims	

### 2. Citations and explanations see separate sheet

## VI. Certain documents cited

### 1. Certain published documents (Rule 70.10)

and / or

### 2. Non-written disclosures (Rule 70.9)

see separate sheet

## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
see separate sheet

**ITEM V**

The following documents cited in the international search report are considered to be relevant with respect to the subject-matter of the present application;

D1: GB-A-1390503 (UNILEVER LTD)

D2: EP-A-0202819 (WARNER LAMBERT CO)

*Novelty, Article 33(2) PCT*

D1 discloses liquid detergent compositions comprising greater than 5% by weight of a surfactant and an encapsulate comprising an active material and an anionic gum. The active material is present in an amount of greater than 10% by weight or is a fragrance present in an amount of greater than 0.5% by weight. Furthermore, the anionic gum may be cross-linked and, preferably, forms a wall of polymer gel around the core material.

D1, however, does not disclose an encapsulate including active material in a hydrated cross-linked anionic gum matrix.

D2 relates to a delivery system consisting of encapsulates comprising a cross-linked alginate or carrageenane matrix entrapping an active component.

D2, however, does neither disclose the use of such delivery systems in liquid detergent compositions comprising surfactants nor that the anionic gum matrix is hydrated.

Independent claims 1, 10 and 11 of the present application are, thus, new with respect to D1 and D2.

Dependent claims 2-9, 12 and 13 disclose preferred embodiments of the claims they refer to. These claims, thus, also meet the requirements of the PCT in respect of novelty.

*Inventive step, Article 33(3) PCT*

The present application and D1 address the same problem.

The object is to provide liquid detergent compositions comprising surfactants and an encapsulate containing an active material, which encapsulate is stable on storage yet dissolves on the composition, thereby releasing the active material.

D1 solves this problem by providing an liquid aqueous medium containing an appropriate quantity of electrolyte which stabilises the capsules in this medium before dilution. On dilution of the composition with water the change in ionic strength of the liquid environment of the capsules enables the active material in the capsules to dissolve.

The present application solves the problem by using an encapsulate which comprises a hydrated cross-linked anionic gum matrix. Such encapsulates are stable in water without the presence of salt and dissolve upon dilution due to the action of diluted surfactants.

This mechanism is different to that disclosed in D1 and, therefore, not derivable from this document.

Although D2 discloses cross-linked alginate or carrageenate matrix based encapsulates as delivery systems, there is no hint in D2 whether these encapsulates are compatible with e.g. surfactants, and, thus, could be incorporated in liquid detergent compositions.

Independent claims 1, 10 and 11 of the present application are, thus, involve an inventive step with respect to D1 and D2.

Claims 2-9, 13 and 14 are dependent on claim 1, 10 and 11 and as such also meet the requirements of the PCT with respect to inventive step.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/GB00/00235

**ITEM VI**

The following document is considered to become relevant in the regional examination proceedings:

Publ. No.: WO-A-99/24159  
Applic. No.: PCT/GB 98/03345  
Priority date: 10.11.1997  
Filing date: 10.11.1998  
Puplic. date: 20.05.1999

**ITEM VIII**

The wording of the description and the amended claims is not consistent.



CLAIMS

1. A liquid detergent composition comprising at least 5% by weight of surfactant and an encapsulate  
5 comprising greater than 10% by weight of the encapsulate of active material, in a hydrated cross-linked anionic gum matrix.
2. A detergent composition according to claim 1, wherein the surfactant is present at a concentration  
in the range from 5 to 50% by weight.
- 10 3. A detergent composition according to claim 2, wherein the surfactant is present at a concentration  
in the range from 10 to 30% by weight.
4. A detergent composition according to any one of the preceding claims, wherein the surfactant is  
15 selected from the group consisting of anionic, nonionic, amphoteric and zwitterionic surfactants and  
mixtures thereof.
5. A detergent composition according to any one of the preceding claims, wherein the  
the active material comprises a fragrance.
- 20 6. A detergent composition according to any one of the preceding claims, wherein the active material  
is present in an amount up to 60%, preferably in the range from 20 to 40%, and particularly 25 to  
30% by weight of the encapsulate.
- 25 7. A detergent composition according to any one of the preceding claims, wherein the anionic gum is  
present in an amount up to 5%, preferably up to 1% by weight of the encapsulate.
8. A detergent composition according to any one of the preceding claims, wherein the anionic gum is  
alginate, carageenan, gellan gum, carboxymethyl cellulose and/or xanthan gum.
- 30 9. A detergent composition according to claim 8, wherein the anionic gum is alginate.
10. A liquid detergent composition comprising at least 5% by weight of surfactant and an  
encapsulate comprising greater than 0.5% by weight of the encapsulate of fragrance, in a hydrated  
35 cross-linked anionic gum matrix.

11. A laundry liquid comprising at least 5% by weight of surfactant and an encapsulate comprising active material in a hydrated cross-linked anionic gum matrix.

12. A laundry liquid according to claim 11, wherein the liquid comprises in the range from 5 to 50%  
5 by weight of anionic surfactant.

13. A laundry liquid according to claims 11 or 12, wherein the liquid additionally comprises in the range from 5 to 80% by weight of builder.

10

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>HCM/C84.01/Q</b>	<b>FOR FURTHER ACTION</b> <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. <b>PCT/GB 00/ 00235</b>	International filing date (day/month/year) <b>28/01/2000</b>	(Earliest) Priority Date (day/month/year) <b>02/02/1999</b>
Applicant  <b>QUEST INTERNATIONAL B.V. et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of Invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No

GB 00/00235

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C11D3/50 C11D3/22 C11D17/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>✓ GB 1 390 503 A (UNILEVER LTD) 16 April 1975 (1975-04-16) cited in the application claims examples page 2, line 81 - line 88 page 3, line 6 - line 15 page 3, line 53 - line 79 page 3, line 111 - page 4, line 4</p>	1-14
A	<p>✓ EP 0 202 819 A (WARNER LAMBERT CO) 26 November 1986 (1986-11-26) claims 1-7, 11-22 page 3, line 20 - page 4, line 14 page 10, line 29 - line 33</p> <p style="text-align: center;">--- -/--</p>	1,5-12

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

24 May 2000

Date of mailing of the international search report

09/06/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Neys, P

## INTERNATIONAL SEARCH REPORT

International Application No

P 99/00235

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A ✓	WO 99 24159 A (QUEST INT.) 20 May 1999 (1999-05-20) cited in the application the whole document -----	1,5-12

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

P B 00/00235

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 1390503	A	16-04-1975	BE 781499 A	02-10-1972
			CA 968248 A	27-05-1975
			DE 2215441 A	12-10-1972
			FR 2132216 A	17-11-1972
			IT 954565 B	15-09-1973
			NL 7204416 A	03-10-1972
			ZA 7202050 A	28-11-1973
<hr/>				
EP 0202819	A	26-11-1986	US 4695463 A	22-09-1987
			AU 571372 B	14-04-1988
			AU 5765086 A	27-11-1986
			CA 1264034 A	27-12-1989
			DK 243286 A	25-11-1986
			ES 555288 D	01-08-1987
			ES 8801766 A	01-05-1988
			FI 862095 A	25-11-1986
			GR 861350 A	16-09-1986
			JP 62023434 A	31-01-1987
			NO 862059 A	25-11-1986
			NO 912643 A	25-11-1986
			ZA 8602641 A	26-11-1986
<hr/>				
WO 9924159	A	20-05-1999	AU 1042999 A	31-05-1999
<hr/>				

# PCT

## REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference  
(if desired) (12 characters maximum)

HCM/C84.01/Q

**Box No. I TITLE OF INVENTION**

Detergent Composition

**Box No. II APPLICANT**

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

Quest International B.V.  
Huizerstraatweg 28  
1411 GP Naarden  
The Netherlands

☐ This person is also inventor.

Telephone No.

Facsimile No.

Teleprinter No.

State (that is, country) of nationality:

NL

State (that is, country) of residence:

NL

This person is applicant for the purposes of:

☐ all designated States

☒ all designated States except the United States of America

☐ the United States of America only

☐ the States indicated in the Supplemental Box

**Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)**

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

NESS, Jeremy Nicholas  
25 High Snoad Wood, Challock  
Ashford, Kent  
TN25 4DQ, United Kingdom

This person is:

☐ applicant only

☒ applicant and inventor

☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

GB

State (that is, country) of residence:

GB

This person is applicant for the purposes of:

☐ all designated States

☐ all designated States except the United States of America

☒ the United States of America only

☐ the States indicated in the Supplemental Box

☒ Further applicants and/or (further) inventors are indicated on a continuation sheet.

**Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

☒ agent

☐ common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

Keith W Nash & Co  
90-92 Regent Street  
Cambridge  
CB2 1DP  
United Kingdom

Telephone No.

(01223) 355477

Facsimile No.

(01223) 324353

Teleprinter No.

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

## Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

*If none of the following sub-boxes is used, this sheet should not be included in the request.*

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

GOODALL, Marcus James  
2 Meadow Cottages, Nackington Road  
Canterbury, Kent  
CT4 7AB, United Kingdom

This person is:

- ☐ applicant only  
☒ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

GB

State (that is, country) of residence:

GB

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☒ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- ☐ applicant only  
☐ applicant and inventor  
☐ inventor only (If this check-box is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:

- ☐ all designated States ☐ all designated States except the United States of America ☐ the United States of America only ☐ the States indicated in the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on another continuation sheet.



**Box No.V DESIGNATION OF STATES**

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

**Regional Patent**

- ☒ **AP** ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
- ☒ **EA** Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ **EP** European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT
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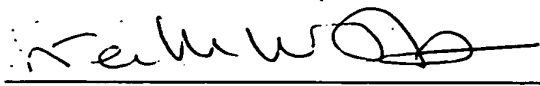
**National Patent (if other kind of protection or treatment desired, specify on dotted line):**

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<b>Box No. VI PRIORITY CLAIM</b>		<input type="checkbox"/> Further priority claim indicated in the Supplemental Box.		
Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application:* regional Office	international application: receiving Office
item (1) 02.02.1999 2nd February 1999	9902225.3	GB		
item (2) 16.03.1999 16 March 1999	9905868.7	GB		
item (3)				
<input checked="" type="checkbox"/> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s): <u>(1) + (2)</u>				
<small>* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.</small>				
<b>Box No. VII INTERNATIONAL SEARCHING AUTHORITY</b>				
<b>Choice of International Searching Authority (ISA)</b> <small>(if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):</small>		<b>Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):</b> Date (day/month/year)      Number      Country (or regional Office)		
ISA /				
<b>Box No. VIII CHECK LIST; LANGUAGE OF FILING</b>				
This international application contains the following number of sheets: request : 4 description (excluding sequence listing part) : 19 claims : 2 abstract : 1 drawings : - sequence listing part of description : - Total number of sheets : 26		This international application is accompanied by the item(s) marked below: 1. <input type="checkbox"/> fee calculation sheet 2. <input type="checkbox"/> separate signed power of attorney 3. <input type="checkbox"/> copy of general power of attorney; reference number, if any: 4. <input type="checkbox"/> statement explaining lack of signature 5. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): 6. <input type="checkbox"/> translation of international application into (language): 7. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material 8. <input type="checkbox"/> nucleotide and/or amino acid sequence listing in computer readable form 9. <input type="checkbox"/> other (specify):		
Figure of the drawings which should accompany the abstract:		Language of filing of the international application: English		
<b>Box No. IX SIGNATURE OF APPLICANT OR AGENT</b>				
<small>Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).</small>				
 Keith W Nash & Co, Agents				

<b>For receiving Office use only</b>	
1. Date of actual receipt of the purported international application: 3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application: 4. Date of timely receipt of the required corrections under PCT Article 11(2): 5. International Searching Authority (if two or more are competent): ISA /	2. Drawings: <input type="checkbox"/> received: <input type="checkbox"/> not received: 6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid.

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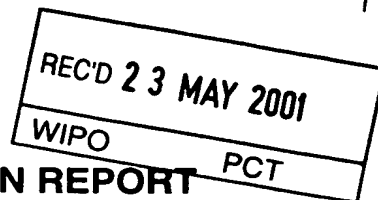
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INTERNET COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference HCM/C84.01/Q	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/00235	International filing date (day/month/year) 28/01/2000	Priority date (day/month/year) 02/02/1999
International Patent Classification (IPC) or national classification and IPC C11D3/50		
Applicant QUEST INTERNATIONAL B.V. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 6 sheets, including this cover sheet.

- ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  09/08/2000	Date of completion of this report  21.05.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Renoth, H  Telephone No. +49 89 2399 8589 

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB00/00235

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-20 as originally filed

**Claims, No.:**

1-13 as received on 07/03/2001 with letter of 05/03/2001

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/GB00/00235

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes:	Claims	1-13
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-13
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-13
	No:	Claims	

2. Citations and explanations  
**see separate sheet**

**VI. Certain documents cited**

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**ITEM V**

The following documents cited in the international search report are considered to be relevant with respect to the subject-matter of the present application;

D1: GB-A-1390503 (UNILEVER LTD)

D2: EP-A-0202819 (WARNER LAMBERT CO)

*Novelty, Article 33(2) PCT*

D1 discloses liquid detergent compositions comprising greater than 5% by weight of a surfactant and an encapsulate comprising an active material and an anionic gum. The active material is present in an amount of greater than 10% by weight or is a fragrance present in an amount of greater than 0.5% by weight. Furthermore, the anionic gum may be cross-linked and, preferably, forms a wall of polymer gel around the core material.

D1, however, does not disclose an encapsulate including active material in a hydrated cross-linked anionic gum matrix.

D2 relates to a delivery system consisting of encapsulates comprising a cross-linked alginate or carrageenane matrix entrapping an active component.

D2, however, does neither disclose the use of such delivery systems in liquid detergent compositions comprising surfactants nor that the anionic gum matrix is hydrated.

Independent claims 1, 10 and 11 of the present application are, thus, new with respect to D1 and D2.

Dependent claims 2-9, 12 and 13 disclose preferred embodiments of the claims they refer to. These claims, thus, also meet the requirements of the PCT in respect of novelty.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/GB00/00235

*Inventive step, Article 33(3) PCT*

The present application and D1 address the same problem.

The object is to provide liquid detergent compositions comprising surfactants and an encapsulate containing an active material, which encapsulate is stable on storage yet dissolves on the composition, thereby releasing the active material.

D1 solves this problem by providing an liquid aqueous medium containing an appropriate quantity of electrolyte which stabilises the capsules in this medium before dilution. On dilution of the composition with water the change in ionic strength of the liquid environment of the capsules enables the active material in the capsules to dissolve.

The present application solves the problem by using an encapsulate which comprises a hydrated cross-linked anionic gum matrix. Such encapsulates are stable in water without the presence of salt and dissolve upon dilution due to the action of diluted surfactants.

This mechanism is different to that disclosed in D1 and, therefore, not derivable from this document.

Although D2 discloses cross-linked alginate or carrageenate matrix based encapsulates as delivery systems, there is no hint in D2 whether these encapsulates are compatible with e.g. surfactants, and, thus, could be incorporated in liquid detergent compositions.

Independent claims 1, 10 and 11 of the present application are, thus, involve an inventive step with respect to D1 and D2.

Claims 2-9, 13 and 14 are dependent on claim 1, 10 and 11 and as such also meet the requirements of the PCT with respect to inventive step.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/GB00/00235

**ITEM VI**

The following document is considered to become relevant in the regional examination proceedings:

Pupl. No.: WO-A-99/24159  
Applic. No.: PCT/GB 98/03345  
Priority date: 10.11.1997  
Filing date: 10.11.1998  
Puplic. date: 20.05.1999

**ITEM VIII**

The wording of the description and the amended claims is not consistent.



CLAIMS

1. A liquid detergent composition comprising greater than 5% by weight of surfactant and an  
5 encapsulate comprising greater than 10% by weight of the encapsulate of active material, and a  
cross-linked anionic gum.
2. A detergent composition according to claim 1, wherein the surfactant is present at a concentration  
in the range from 5 to 50% by weight.
- 10 3. A detergent composition according to claim 2, wherein the surfactant is present at a concentration  
in the range from 10 to 30% by weight.
4. A detergent composition according to any one of the preceding claims, wherein the surfactant is  
15 selected from the group consisting of anionic, nonionic, amphoteric and zwitterionic surfactants and  
mixtures thereof.
5. A detergent composition according to any one of the preceding claims, wherein the  
the active material comprises a fragrance.
- 20 6. A detergent composition according to any one of the preceding claims, wherein the active material  
is present in an amount up to 60%, preferably in the range from 10 to 60%, more preferably 20 to  
60%, and particularly 25 to 30% by weight of the encapsulate.
- 25 7. A detergent composition according to any one of the preceding claims, wherein the anionic gum is  
present in an amount up to 5%, preferably up to 1% by weight of the encapsulate.
8. A detergent composition according to any one of the preceding claims, wherein the anionic gum is  
alginate, carageenan, gellan gum, carboxymethyl cellulose and/or xanthan gum.
- 30 9. A detergent composition according to claim 8, wherein the anionic gum is alginate.
10. A detergent composition according to any one of the preceding claims, wherein the anionic gum  
is hydrated.

11. A liquid detergent composition comprising greater than 5% by weight of surfactant and an encapsulate comprising greater than 0.5% by weight of the encapsulate of fragrance, and an anionic gum.

5 12. A laundry liquid comprising greater than 5% by weight of surfactant and an encapsulate comprising active material and an anionic gum.

13. A laundry liquid according to claim 12, wherein the liquid comprises in the range from 5 to 50% by weight of anionic surfactant.

10

14. A laundry liquid according to claims 12 or 13, wherein the liquid additionally comprises in the range from 5 to 80% by weight of builder.